#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019394 Address: 333 Burma Road **Date Inspected:** 18-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Zhou Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG Segments** 

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

**OBG Trial Assembly Yard** 

Segment 12BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3005A-004, Side Plate to Bottom Plate hold back weld. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3005M-090, Longitudinal Diaphragm to Bottom Plate hold back weld. The welder is identified as #046704 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-TC-U4b-FCM-1.

Segment 12CW

# WELDING INSPECTION REPORT

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This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3006A-011, Side Plate to Bottom Plate hold back weld. The welder is identified as #040611 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3006S-035, Longitudinal Diaphragm to Bottom Plate hold back weld. The welder is identified as #046704 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-TC-U4b-FCM-1.

Segment 12BW/12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP3060-001-025, Deck Plate I-rib splice. The welder is identified as #041713 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

Segment 12BE/12CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP3012-001-023, Deck Plate I-rib splice. The welder is identified as #050289 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP3022-001-024, Deck Plate I-rib splice. The welder is identified as #044515 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b.

Segment 12BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated DP3650-001-013, 014, Deck Plate I-rib hold back weld. The welder is identified as #057333 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1.

Segment 12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated DP3061-001-007, 008, Deck Plate I-rib hold back weld. The welder is identified as #057333 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-T-4114-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector is identified as Shi Lie and

# WELDING INSPECTION REPORT

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Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Segment 12BE

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Side Plate at locations of removed fit up plate along the Side Plate to Bottom Plate hold back weld, bike path side.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



#### **Summary of Conversations:**

No relevant conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Dsouza, Christopher	QA Reviewer